

Patent claims

1. A linear ball bearing having a guide carriage (2) which is guided on a guide rail (1) in a longitudinally displaceable manner and is mounted in rolling contact on longitudinal sides of the guide rail (1) via balls (3) which are arranged on each longitudinal side in at least two parallel ball rows (4, 5) encircling in endless ball channels (6), each ball (3) of the one ball row (5) together with an adjacent ball (3) of the other ball row (4) being held all round in cage pockets (8) of a common cage piece (7), characterized in that the cage piece (7) has exactly two cage pockets (8) for one ball (3) each from both ball rows (4, 5), each cage piece (7), as viewed in the running direction of the balls (3), being provided at both ends with convexly curved end surfaces (9) for contact with the end surfaces (9) of adjacent cage pieces (7), which end surfaces (9) extend essentially up to the cage piece sides (10).

2. The linear ball bearing as claimed in claim 1, in which the two cage pockets (8) of the cage piece (7) are connected to one another in one piece by a web (11) whose web sides facing away from one another and arranged essentially parallel to the running direction of the balls (3) are provided with contact surfaces (12, 13) for guiding the cage piece (7) on guide surfaces (14, 15, 16, 17) of the guide carriage (2).

3. The linear ball bearing as claimed in claim 1, in which the end surfaces (9) have a partly cylindrical profile, the cylinder axis of which is arranged transversely to the running direction of the balls (3) and parallel to a plane in which the two ball rows (4, 5) of a longitudinal side lie.